

To:

J. E. Crowe

Attn: Prog. Developmen

From:

Michael L. Hine

By: Larry L. Piche

Subject:

**PESA Review** 

Date:

May 17, 2002

Larry L. Picke

Refer to: IL 29 (FAP 318) Job No. P-94-009-01

From Chillicothe to 1-180; Rome, Chillicothe, Lacon, Henry, Putnam

Florid, and Princeton South Quadrangles Peorla, Marshall, Putham and Bureau Countles

ISGS # 1331 Sequence #9816

Attached is a copy of the Preliminary Environmental Site Assessment conducted by the Illinois State Geological Survey (ISGS) for the subject project as described in your Special Waste Survey Request.

Volatile organic and metals testing was done for this project and the attached (ISGS) report indicates possible detection of contamination at five sites. In addition, one site from ISGS # 801, dated April 22, 1996, has been re-evaluated since depth restrictions have been modified since the issuance of that report. The stipulations stated in this memorandum supercede those previously set. The report has assessed a high risk for this project and recommends that further soil boring and sample analysis needs to be performed to determine the precise nature and extent of the contamination if excavation or additional right-of-way is required at these locations.

It is the opinion of this office, in consultation with the Chief Counsel's Office, that if rightof-way acquisition includes a parcel with an underground storage tank(s) and Land Acquisition Procedures are followed and if construction excavation and utility relocation do not exceed the maximum testing depth at each site and does not exceed

1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1331-13A and 0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1331-13B at Residence, located on the NE quadrant of University Ave., and Chestnut St. in the 500 block of University Ave., Henry:

no grading or excavation within 15 meters (50 feet) of soil boring 1331-14A and 1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1331-14B at Mcclain Ford Used Cars, located on the east side of University Avenue in the 500 block of University Ave., Henry:

no grading or excavation at Ag View FS (Site 1334-17), located on the west side of IL 29 at 1195 IL 29, Henry;

1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1331-19A and 0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1331-19B at Vacant lot, located on the west side of Railroad St. one parcel north of North St. in the 300 block of Railroad St., Sparland:

Page 2 May 17, 2002

no grading or excavation at Battery Vault (Site 1331-21), located on the SE quadrant of IL 29 and County Line Rd., Sparland;

and from ISGS # 801:

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 801-6B at Abandoned Amoco Pipeline (Site 1331-G), location crosses IL 29 approximately 61 meters (200 feet) south of Senachwine Creek, Chillicothe,

then no additional preliminary testing for the project is necessary. If the above stipulations can be met, then the project will be in compliance with Departmental Hazardous Waste Policy LEN-13. If the stipulations cannot be met, then the statewide consultant should be requested to perform additional investigations. Please notify this office of any actions you may decide to take concerning these sites (i.e., avoidance, further investigation, etc.). The PESA Response form can be found on the PMA.

Other findings and recommendations of the report should be carefully considered. If you have any questions regarding this report or the tasking of the statewide consultant, please contact John Washburn at 217/782-7074 or Steven Gobelman at 217/785-4246.

#### Attachment

cc: Randy Schick Central Bureau of Land Acquisition District Bureau of Land Acquisition District Utility Coordinator Scott Stitt

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June 24, 2002

BUREAU OF PROGRAM DEVELOPMENT Studies & Plans – Phase I Illinois Route 29 Study Peoria, Marshall, Putnam & Bureau Counties Job No. P-94-009-01 Catalog No. 032469-00

Mr. Dan Dupies CH2M Hill 135 South 84<sup>th</sup> Street Suite 325 Milwaukee, WI 53214

Dear Mr. Dupies:

The enclosed May 21, 2002 memo from IDNR refers to the IDNR Action report mailed to you on October 2, 2001 and to questions from Paula Green concerning that material. A copy of the September 28, 2002 e-mail questions is also enclosed.

The maps mentioned in the memo under items 1, 2 and 3 were e-mailed to you on October 1, 2002.

Please contact Paula Green of this office if you have any questions concerning this matter.

Very truly yours.

Joseph E. Crowe, PE District Engineer

By: Eric S. Therkildsen, PE

Program Development Engineer

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cc: Dick Stafford - CH2M Hill, Chicago Office

M. Lewis (no attach.)

P. Green



# NATURAL MEMORANDUN

Barb Traeger

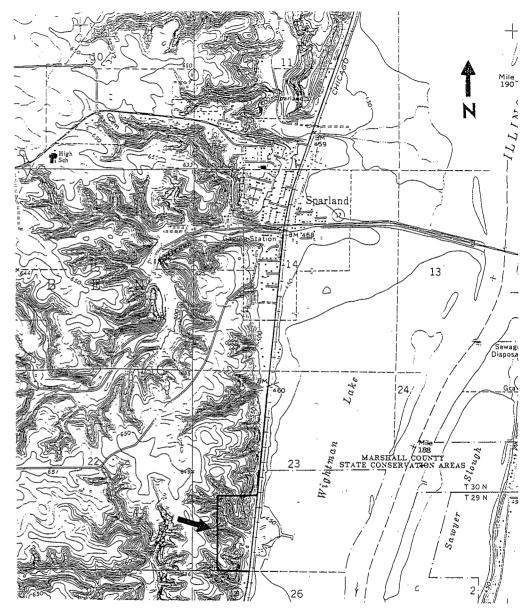
5-21-02

Michelle Simone ws

IL Route 29 Questions

Below are answers to the questions that Paula Green had sent you for clarification on material from the IDNR on the Route 29 study area. If you need further information please feel free to contact me (309-347-5119).

- 1 Spring Branch Conservation Area is a part of Marshall State Fish and Wildlife Area which is indicated by blue lines on the enclosed map. If you have any specific questions about the boundaries of Marshall SFWA, you can call the site staff directly at 309-246-8351,
- 2 The blue square located in Section 27 is part of Marshall SFWA.
- 3 On the enclosed map, in Section 23, the Marshall Co Conservation Area Hill Prairies INAI is indicated in orange. Not all of this is owned by the state and therefore the entire Natural Area doesn't fall within the Land and Water Reserve boundaries. The Marshall Co Hill Prairies Land and Water Reserve is outlined in green. I have enclosed two additional maps, one of just the INAI boundaries and one of just the Land and Water Reserve boundaries.
- 4 River otter sighting #225. This was a roadkill of a juvenile river otter found on August 19. 1997. If you need any other information about this record, call Bob Gottfried at 217-785-8774.
- 5 Names of watersheds in river otter occurrence record These watersheds don't have names to correspond to the numbers. These watershed numbers are USEPA HCU (hydrological category units) 08 designations. To get more information on these watershed designations, contact the USEPA (not IL EPA, apparently they have a different numbering system).



11.3 Marshall County Hill Prairies Land and Water Reserve Registry boundaries - USGS 7.5' topographic map

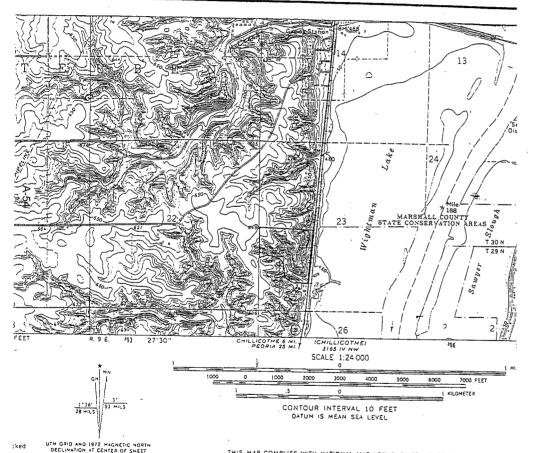
County\_\_\_\_\_MARSHALL No. 15

Name of Area MARSHALL CO. CONSERVATION AREA HILL PRAIRIES

Quadrangle\_\_\_LACON 7.5'

Location\_Sec 23, T12N, R9E

# ILLINOIS NATURAL AREAS INVENTORY



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDAROS FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092 AND BY THE STATE GEOLOGICAL SURVEY, URBANA, ILLINOIS 61801 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE'ON REQUEST Green, Paula A

From: Green Paula A

Sent: Friday, September 28, 2001 4:25 PM

To: Traeger, Barb J.
Subject: IL 29 - IDNR Material

Thanks for the material from IDNR for the IL 29 study area. After reviewing the material I have the following questions:

Is a print out available for the Spring Branch State Conservation Area?

On the map showing the Marshall County Conservation Area Hill Prairie there is a blue square located of the east boundary of Sec. 27. Is this part of the Marshall County State Conservation Area or is it a separate entity?

The boundaries of the Marshall County Conservation Area Hill Prairie Land and Water Reserve are difficult to distinguish. Can IDNR provide better mapping?

River sighting #225 is not listed on Element Occurrence Record AMAJF 1001\*008\*IL. Is there any information on this sighting?

The 2<sup>nd</sup> page of the same occurrence record list 6 watersheds by number. Can we have the names of the watersheds.

If this is the only information IDNR has available concerning plants and animals within the natural areas I think we need to have our surveyors inventory the areas? Please discuss this again with Charles

Paula Creen Environmental Studies Unit Illinois Department of Transportation 401 Main Street Peoria. IL 61603 (309) 671-3478 greenpa@nt.dot.state.il.us





To:

J. E. Crowe

Attn: Prog. Development Engineer

From:

Michael L. Hine

By: Larry L. Piche

Subject:

**PESA Review** 

Date:

November 6, 2002

Refer to: IL 29 (FAP 318)

Job No. P-94-009-01

IL 6 to Truit Ave. in Chillicothe; Survey for Chillicothe Bypass

Peoria, Marshall, Putnam & Bureau Countles ISGS # 1331A Sequence # 9816A

Attached is a copy of the Preliminary Environmental Site Assessment conducted by the Illinois State Geological Survey (ISGS) for the subject project as described in your Special Waste Survey Request.

Volatile organic and metals testing was done for this project and the attached (ISGS) report indicates possible detection of contamination at eight sites. The report has assessed a high risk for this project and recommends that further soil boring and sample analysis needs to be performed to determine the precise nature and extent of the contamination if excavation or additional right-of-way is required at these locations.

it is the opinion of this office, in consultation with the Chief Counsel's Office, that if rightof-way acquisition includes a parcel with an underground storage tank(s) and Land Acquisition Procedures are followed and if construction excavation and utility relocation do not exceed the maximum testing depth at each site and does not exceed

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1331A-3A at Vacant building, 1235 North Fourth St.;

no grading or excavation at Riverside Chevy (Site 1331A-17), 200 Plaza Drive Rd.;

no grading or excavation at battery vault (Site 1331A-18), located on the SE guadrant of IL 29 and Swain Road;

no grading or excavation at battery vault (Site 1331A-20), located on the SE quadrant of IL 29 and Knox St.;

1-2-meters (4-feet) within-15-meters-(50-feet) of soil boring 1331A-21A and 0.9 meters-(3 feet) within 15 meters (50 feet) of soil boring 1331-21B at Shell/Freedom station, 15530 IL 29:

no grading or excavation at Burlington Northern Rail Yard (Site 1331A-25), located on the north side of Chillicothe from Benedict St. west to Krause Rd.:

Page 2 November 6, 2002

0.6 meters (2 feet) within 15 meters (50 feet) of soil boring 1331A-26A and 1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1331A-26B at Casey's, 1206 Truit Aye.;

no grading or excavation at Caterpillar Technical Center (Site 1331A-34A), 909 Cedar Hills Dr.,

then no additional preliminary testing for the project is necessary. Please note that the following archived CERCLIS sites intersect the project route: Caterpillar Technical Center (Site 1331A-34) and Caterpillar Mossville (Site 1331A-D).

If the above stipulations can be met, then the project will be in compliance with Departmental Hazardous Waste Policy LEN-13. If the stipulations cannot be met, then the statewide consultant should be requested to perform additional investigations, Please notify this office of any actions you may decide to take concerning these sites (i.e., avoidance, further investigation, etc.). The PESA Response form can be found on the PMA.

Other findings and recommendations of the report should be carefully considered. If you have any questions regarding this report or the tasking of the statewide consultant, please contact John Washburn at 217/782-7074 or Steven Gobelman at 217/785-4246.

#### Attachment

cc: Randy Schick
Central Bureau of Land Acquisition
District Bureau of Land Acquisition
District Utility Coordinator
Scott Stilt
Todd Hummert

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NATURAL RESOURCES

#### ILLINOIS STATE GEOLOGICAL SURVEY

Natural Resources Suilding 615 East Peabody Drive Champaign, IL 61820-6964 217/333-4747 FAX 217/244-7004



November 8, 2002

Mike Lewis
Illinois Department of Transportation
District 4
401 Main St.
Peoria, IL 61602-1111

NOV 1 2 2002

Dear Mike:

Enclosed please find numerous paper-copies (2 each) of ISGS deliverables for the IL 29 project. Most of these products have been in the hands of John Washburn since this past summer. He requested that we send you 2 copies of those same products. Please provide one of the copies to CH2M Hill. In addition are new products from Bob Bauer.

We are in the final stages of tweaking the 3-regional volume model and the data that supports this. We want to make sure that this model is as good as it is going to get before we pass it off to you and your consultants. It should be coming very soon. In the meantime, if you need any help with any of the enclosed products, you need additional copies, or would like preliminary digital files of products, please let me know.

Sincerely

Richard C. Berg

Senior Geologist and Director Geological Mapping Program

RCB:dms

Enclosures

dms:docs/map/Leis fatter 1:0802.wps

Printed on Recycled Paper



April 16, 2003

Mr. Dan Dupies CH2M Hill 135 South 84<sup>th</sup> Street Suite 325 Milwaukee, WI 53214

Dear Mr. Dupies:

Enclosed for your use is one copy of the Assessment of the Biological Resources Report for the Illinois 29 project.

If you have any questions concerning this matter, please contact Ms. Paula Green of this office at (309) 671-3478.

Very truly yours,

Joseph E. Crowe, P.E. District Engineer

By: Eric S. Therkildsen, P.E.
Program Development Engineer

PAG:kme/s:/mgr2/winword/std8plns/environment/letters/pag0001.doc

Eng. A Therholden

Enclosure

cc: CH2Hill, Chicago Office (Attn: Dick Stafford) – No Attach.
 M. Lewis – No attach.
 Project File - P. Green



# Marshall-Putnam Soil and Water Conservation District

July 21, 2003

Eric Therkildsen Illinois Department of Transportation 401 Main Street Peoria, Illinois 61602

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M. Leuis

RE: Opposition to Illinois Route 29 Expansion

Mr. Therkildsen.

The Marshall-Putnam Soil and Water Conservation District Board of Directors, at the July 9, 2003 meeting, voted unanimously to **OPPOSE** the creation of the Route 29 Expansion connecting Peoria to Interstate 80 as proposed by the Illinois Department of Transportation and the engineering firm CH2MHill. Opposition is based on minimal community development with high impact on natural resources and existing farm operations including but not limited to the sensitive bluff areas, wetland areas and Miller-Anderson Nature Preserve.

At the forefront of discussion was the permanent loss of prime farmland. Prime Farmland is defined as land (soils) best suited for farming. Prime Farmland is flat or gently rolling, consistently produces the most food, feed, fiber, forage and oilseed crops with the least amount of fuel, fertilizer, and labor. The soil quality, growing season, and moisture supply assures continuous high productivity without degrading the environment. The presence of all these factors together in central Illinois is unsurpassed by any other area in the world!

The proposed location for the Route 29 Expansion intersects Ag Areas in Marshall and Putnam Counties. The Agricultural Areas Conservation and Protection Act (P.A. 81-1173) provides a means by which agricultural land may be protected and enhanced as a viable segment of the states economy and as an economic and environmental resource of major importance. Ag Areas must consist of 350 contiguous acres or more of land. These areas are organized among local landowners and county government then registered as an Agricultural Protection Area with the Illinois Department of Agriculture for the purpose of designating blocks of land parcels that are committed to production of agricultural commodities.

429 University • Henry, IL 61537-1079 • 309-364-3991 Ext. 3

Additionally, the proposed expansion adversely affects irrigated farming operations, federal and state enrolled protected lands such as those in the Conservation Reserve Program and the Conservation Reserve Enhancement Program and the Miller-Anderson Nature Preserve located on the current Route 29 on the Bureau-Putnam Border.

Agriculture plays a vital role in Central Illinois. It provides employment, protects and enhances our natural resources, contributes heavily to the local economy, and provides a wholesome quality of life to residents,

The Marshall –Putnam Soil and Water Conservation District is a locally organized unit of government promoting the protection, maintenance, improvement, and wise use of the soil, water and related resources in Marshall and Putnam counties, the state of Illinois, and the nation.

For more information, please contact the Marshall-Putnam Soil and Water Conservation District at 309-364-3913 x3.

Jill Ketter

Resource Conservationist



Rod R. Blagojevich, Governor

Joel Brunsvold, Director

February 2, 2004

Mr. Joseph E. Crowe, P.E.

District Engineer, Div. Of Highways/District 4

Illinois Department of Transportation 401 Main Street

Peoria, Illinois 61602-1111

ATTN: Paula Green

Dear Mr. Crowe:

RE: Illinois Rt. 29 Study IL. 6 to I-180 Interchange

Hydrologic Survey Request and Additional Surveys

The Illinois Department of Natural Resources (IDNR) recently attended the Technical Advisory Committee Meeting or the Illinois 29 Corridor Study. It was during that meeting that IDNR referred to a previous request for a hydrology study along portions of the Miller-Anderson Woods Nature Preserve. This study had not been initiated at that time. It is the intent of this letter by a formal request that this study be completed along with the other resource surveys. Specifics for the study would be determined after a preliminary meeting with the District 4 Hydrology Engineers and the State Geological Survey.

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District 4

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It was also requested that additional surveys be completed for the Blandings Turtle as this is a recent addition to the database that was not included in the original Agency Action Report for this project. See attached map.

The IDNR supports the recommendation of the Natural History Survey to do additional surveys for the Four-toed Salamander due to the presence of habitat found during the initial survey.

The Cerulean Warbler was recently sited within the Miller-Anderson Woods Nature Preserve and could appear on the listed species database in the near future. For this reason it would be beneficial to survey for this species also.

If you have any questions on the above, please contact me at 217-785-5500.

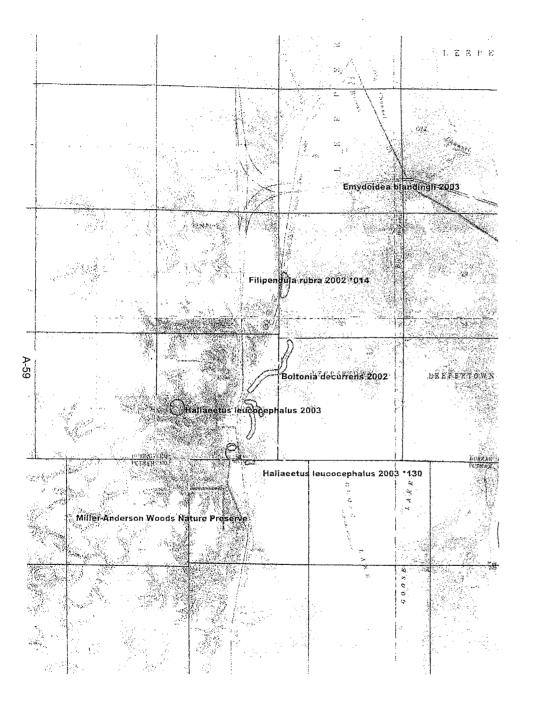
Sincerely,

Steve Hamer

Transportation Review Program

Division of Natural Resource Review

cc: Tom Brooks /IDOT Central Office



MEETING SUMMARY CH2MHILL

# IL Route 29 Study - IL 6 to I-80 Groundwater Meeting

ATTENDEES: Jim Jodie/CH2MHILL

Kim Kolody/CH2MHILL Roger Huddleston/CH2MHILL

Neil Von Bebber/IDOT

Hydraulics

Bob Dawe/IDOT Hydraulics Jim Hamilton/Hutchison

Engineering, Inc.

Fred Lin/Lin Engineering

James Miner/ISGS

Jim Jodie

DATE: March 15, 2004

FROM:

Mike Lewis/IDOT Dist. 4 Greg Larson/IDOT Dist. 4 Eric Therkildsen/IDOT Dist. 4 Paula Green/IDOT Dist. 4 Tom Brooks/IDOT Springfield

Todd Bittner/IDNR Pat Malone/IDNR Steve Hame/IDNR Tom Lerczak/INPL

# **Introduction and Meeting Purpose**

At the January 20th, 2004 TAC meeting IDNR requested a meeting with the IDOT to discuss groundwater equilibrium concerns that could potentially be caused by widening IL 29 from a two-lane to a four-lane facility in the area of Miller-Anderson Woods.

On March 12th, 2004, IDOT, IDNR, INPL, ISGS, CH2M HILL, Lin Engineering, and Hutchison Engineering met at IDOT District 4 offices to address groundwater issues.

During a brief presentation CH2M HILL discussed the following:

- 1. The roadway geometrics, including design of the compressed typical section in the Miller Anderson Woods area which had guardrail on the west side of the roadway and retaining walls on the east.
- 2. Different types of retaining walls that could be installed to minimize subsoil disturbances.
- 3. Details about the existing soil conditions and strata, existing groundwater flow, and the anticipated effects of the proposed widened roadway to groundwater flow.

## Recommendations

At the meeting, it was agreed to do the following for collecting baseline groundwater data:

 ISGS will develop a proposed scope and well locations to complete one transect of wells along the existing bluff/slope, extending from a point along Old IL 29 to the west side of existing IL 29. This will be a collaborative effort between ISGS and CH2M HILL hydrogeologists.

168912

- IDNR will assist in coordinating access and permitting for drilling in the nature preserve.
- The wells will be monitored to determine the baseline for existing conditions. ISGS, IDOT and IDNR will decide the duration.

If no red flags (such as a dramatic change of several feet in the subsurface water elevations, or the presence of a confining layer that creates artesian groundwater conditions beneath IL 29) are identified as a result of the baseline data, IDOT will consider it a closed issue. Additional studies will not be needed unless an important variation or issue is raised.

IDOT will re-assess the situation pre- and post construction.

### **Meeting Presentation Minutes**

Participants were introduced.

Jim Jodie provided background information regarding the meeting purpose, generally described the current design in the area of Miller-Anderson Woods, and introduced the speakers and topics that would be covered in the meeting.

Kim Kolody outlined the study area of interest for the meeting, described concerns with the previous design, and described modifications made as a result of concerns that were raised during the January meeting. Key factors she highlighted in the current design were:

- Current design alternatives will focus on alignments that do not relocate the railroad
  east of the existing IL 29 alignment.
- The existing pavement will be used for the southbound lanes and widening will be to the east.
- The profile is essentially at the same elevation as the existing roadway.
- The northbound lanes are on fill so there is no cut or excavation there.
- Based on concerns raised previously, the proposed centerline is shifted 8 feet east of the
  existing IL 29 centerline. The shift allows for elimination of the previously proposed
  retaining wall on the west. Instead, a guardrail will be used on the west while the east
  will require a retaining wall. Access to a couple of east properties may be eliminated.
- As a result, there will be approximately 40 feet between the proposed east roadway
  retaining wall and the center of the railroad tracks. This is a reduction of 10 feet from the
  previous proposal (existing railroad right of way is 50 from centerline of tracks). Even
  with the reduction, the current design will not require large longitudinal drain pipes
  since a typical ditch can be accommodated.
- The pavement surface was modified from the initial design so that there is not a normal crown. Instead the southbound pavement will drain to the west and the northbound

pavement will drain to the east. The proposed design will minimize cost and maintenance of median drainage.

 The existing drainage pattern will continue by using drainage structures to convey water from the west side ditch to the east side ditch.

Jim Hamilton provided handouts and discussion regarding the likely retaining wall design. Key factors he highlighted were:

- The most likely type of wall that will be constructed on the east side in the fill area is an MSE (Mechanically Stabilized Earth) wall. The length of wall required is approximately 6,000 feet and the height would vary up to a maximum of 20 feet (12 feet being typical). There are three key aspects to the wall: (1) The precast base panels, (2) the granular back fill and (3) reinforcing strips that attach to the base panel and extend into the granular back fill. There is plenty of room to construct this type of wall.
- Handouts illustrating drainage alternatives were reviewed. Drainage can be
  accomplished through gaps in the wall, vertical drains, or pipe openings designed to
  match the water table and eliminate pressure build-up behind the wall.

Concrete cantilever walls also were described and shown in the typical drawings, however they may be eliminated. A cantilevered concrete wall is unlikely to be constructed due primarily to the loose granular nature of the fill soils, which would not have suitable strength to support a concrete wall.

Roger Huddleston summarized available geologic and hydrogeologic information that was reviewed, and presented interpretations and conclusions based on these data. Key factors he highlighted were:

- Multiple borings and wells ranging from 5 feet to 100 feet in depth have been installed across the study area, along the roadway to the tops of the bluffs.
- The ISGS has developed a three dimensional model of the geologic subsurface.
- The primary geological formations are the Cahokia formation, which is a stream-type deposit that is a mixture of sand, silt, clay and gravel, typically present in lenses or layers; and the Henry Formation, a predominantly fine-sandy unit. The Cahokia formation, which is the top layer, varies from 5 to 50 feet in thickness and the Henry formation ranges from 10 to 80 feet in thickness. Typically the depth of bedrock is 110 to 120 feet below ground surface in the vicinity of Miller-Anderson Woods.
- The pond elevation in Miller-Anderson Woods is about 460 feet and Goose Lake, down
  the slope and to the east, is 440 feet. The road within this area is at approximate
  elevation of 470 feet and most of that is either currently built up or planned to be built
  up on fill. There is room for the shallow footing for the retaining wall and there are
  ditches on either of the side of the road.
- The ground water is expected to follow the topography and be present very close to the ground surface at the toe of the bluff. This was determined using several known factors.
   These include the groundwater elevations from wells (previously installed at the top of

A-61

the bluff), the existence of the pond on the west side of IL 29, the overall surface topography and the interpretation of the overall hydrologic system. There was no site-specific groundwater elevation data along the road.

- Water is expected to be 2 to 5 feet below the natural ground surface. It may be up to 10 to 15 feet below ground surface beneath the roadway where approximately 10 feet of fill appear to be present. From the toe of the bluff where IL 29 exists down to Goose Lake, groundwater will likely exist at a shallow depth (expected to be within 2 to 5 feet of ground surface) reflecting the surface topography. The 20-foot difference in hydraulic head (between the pond in Miller-Anderson Woods and Goose Lake) is a fairly dramatic head difference for a relatively short horizontal distance. As a result, groundwater gradients are likely to be both eastward and downward in the vicinity of the roadway.
- The proposed retaining wall footings are likely to penetrate 2 to 4 feet below the existing
  ground surface. Ground water levels are likely close to the surface, estimated in the
  range of 2 to 5 feet below ground surface along the east and west sides of the roadway.
   As a result, it is expected that the depth of the base of the retaining wall be at or near the
  water table.

In summary, the geologic materials are predominantly coarse-grained and permeable. The retaining wall will have only a shallow penetration into the subsurface, and the retaining wall can be designed with drains to maintain a hydraulic connection. The overall interpretation and conclusions are that there is likely to be a very minimal, in fact, probably not even a measurable impact to the ambient ground water condition with the current designs proposed for the roadway and retaining wall.

# **Meeting Discussion Minutes**

At this time, the meeting was opened up for discussion. IDNR and INPL presented questions. Clarifications to the hydrogeologic interpretation were provided primarily by Jim Miner of the ISGS, with input from Roger Huddleston, Fred Lin, Jim Hamilton, Kim Kolody, and Jim Jodie regarding other geologic and design parameters, as appropriate. The following key points were raised or clarified during the discussion:

The proposed culverts shall be placed at existing culvert locations and the sizes will be maintained. Wildlife crossings will also be proposed within this area, however, they shall be placed at least above the 2-year high water elevation. This should avoid any existing groundwater impacts. No ditches will be proposed on the west side of the road. On the east side, proposed ditches will be graded between approximately 1 to 2 feet within the existing pond area.

The proposed road sub-base and MSE wall will be constructed of a sandy, granular material.

IDNR clarified that the key environmental concerns are associated with the high quality natural areas associated with the seeps at the base of the bluff, and not the pond directly except to the extent that the pond and seep communities are hydraulically connected. The concern is that either groundwater or surface water elevations could be raised or lowered, and that there are no baseline data on what these elevations are to assess whether the system might be changed as a result of the new road construction. The IDNR is requesting

this baseline data so that in the future, if the system is hydraulically changed it can be documented and remedied. Additionally, more detailed information on how the wetland system works was requested in order to design or make recommendations so that the design minimizes potential impacts. Given that construction will occur at or near the top of the water table and realizing that the water table is not a static elevation, there is a need for more information.

IDOT acknowledged that the existing water table elevation could be monitored to establish a current baseline. During construction, it may be necessary to reestablish the baseline.

ISGS clarified that as long as ditches are not excavated to depths below the water table and there are no confining units that are encountered in the vicinity, the chances of any impacts are relatively low.

Additionally, except in flooding months, the Illinois River probably does not affect the groundwater situation in the Miller-Anderson Woods and proposed roadway area at all.

There was some discussion regarding the effect of the beaver dams, and whether the INDR was interested in maintaining water elevations resulting from the presence of the beaver dams or not. The IDNR commented that a dramatic (3-foot) change in the pond level over a short period of time would not be desirable, as it would likely result in the growth of non-native invasive species which would reduce the quality of the environment.

IDNR suggested developing a groundwater-surface water model.

ISGS commented that that level of assessment was beyond the scope of a baseline study.

IDOT clarified that their obligation is to maintain the current condition.

ISGS and IDOT suggested installing a series of wells along a transect, including at least one in the Nature Preserve to characterize baseline groundwater conditions. It was agreed that wells could be installed along the Old IL 29 alignment that cuts through the nature preserve,

IDNR re-iterated the concern that the primary environmental issue is associated with the seep communities, up the slope from the pond, but that the hydrologic connections are not understood. Specifically, the hydrologic connections not understood result from effects of water leaving the pond from any of three different ways:

- 1. An outlet in the middle of the pond discharging through a partially dammed culvert under IL 29, at approximate proposed Station 6248+10.
- An outlet on the south end of the pond at a beaver dam, at approximate proposed Station 6225+30.
- 3. Through the subsurface soils.

Any changes could negatively affect any of these seep wetland communities. Although there may be a very little chance of there being an effect, the nature preserve is protected by law; there is a need to know if there is a change from the construction. The best way to do that is to get monitoring wells to obtain baseline data.

There was some discussion regarding installing wells in one or two transects across the slope to establish baseline conditions, with the primary issue focusing on the number of

wells or transects that would be sufficient to establish a representative baseline. ISGS commented that the geologic and hydrogeologic conditions are likely to be similar across nearby transects. One transect would enable an assessment of whether any "red flags" were raised. An example of a red flags may be a dramatic change of several feet in the subsurface water elevations or the presence of a confining layer that creates artesian groundwater conditions beneath IL 29. If a red flag is raised, additional data may be collected if deemed necessary. INDR expressed the concern that there may be multiple localized influences affecting the system. ISGS acknowledged that that is always a possibility, but given the small probability of an impact here, an initial transect to establish a baseline and identify "red flags" would probably be sufficient, and if necessary, more wells could be installed

There was some discussion regarding collecting enough data to be analyzed statistically. IDOT commented that they are relying on the scientific expertise of the professional hydrogeologists to make the determination that the data are sufficient to evaluate and identify "red flags".

# Meeting Outcome/Action Items

It was agreed that ISGS would develop a proposed scope and well locations to complete one transect of wells along the slope, extending from a point along Old IL 29 to the east side of the existing IL 29. The actual scope and locations would be developed collaboratively between ISGS and CH2M HILL hydrogeologists, based on the existing data, understanding and interpretation of the hydrogeologic system and issues raised in this meeting. IDNR will assist in coordinating access and permitting for drilling in the nature preserve. If no red flags are identified as a result of the baseline data, IDOT will consider it a closed issue not to be opened for further studies unless an important red flag identifying an issue is raised.

IDOT will re-assess the situation pre- and post construction.



#### ATTENDANCE ROSTER

SUBJECT Ground autor Meeting MEETING DATE March 12, 2004

NAME	REPRESENTING	ADDRESS, PHONE & E-MAIL
Nel Van Beber	IDST Hydrachics	(antal Office 558.4536 Ventilherand pot.do
BOB DAWE	/ ' '	785-2917  Jacksonville IL 217-245-7164 & hutchisonery. Co
	Hutchicon Eng., Inc	Jacksonville 11 217-245-7164 Chutchisonery, co
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Fred Cin	Lin Engineering	210 West Chadnes, Chatham, 16 60629, Alma Vineny.
Tomas MINE	ISGS	210 West Chedows, Chatham 16 5009 Floris Vineny. 2173374823 Missel ISGS. UIV. CO. CO. U. C. CO. CO. CO. CO. CO. CO. C. C. C. CO. C.
KIM KOLOPY	CHZM HILL	CHI 7136933800x245 KKoloce PC CAZO CON
Mike Lewis	IDOT - DIST. 4	401 MAIN/PEOSIA / 309-671-3474
Greatanson	T007.04	309-671-3479
	JOOT 04	309 - 671-3491
Yarelacton	· SPEND	217 787 - 1 285 2943
TODD BIHLEY	IDNR	
PAT MALORE	TONA	\$57224-8219 \$7785-5500
Sifeve Hyme	IPATE	775-550
TON LERCZAK	INPL	201-543-2744
	/	
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May 3, 2004

BUREAU OF PROGRAM DEVELOPMENT STUDIES & PLANS – PHASE I Illinois Route 29 Study Peoria, Marshall, Putnam & Bureau Counties Job No. P-94-009-01 Catalog No. 032469-00

«Title» «FirstName» «LastName» «Company» «Address» «CityStateZip»

#### Dear «Title» «LastName»:

The Illinois Department of Transportation (IDOT) is in the process of evaluating agricultural impacts for the Illinois Route 29 Study. The Illinois Route 29 Study extends from Illinois Route 6 south of Chillicothe to Interstate 180 south of Hennepin, Illinois. The Department is requesting permission for the Illinois Route 29 consultant, CH2M Hill, to secure names and addresses of owners/operators and their associated farms in the study area counties.

The Federal Highway Administration (FHWA) under the provisions of the Freedom of Information Act (FOIA), United States Code (U.S.C.) 552 as amended, has sent a request in writing to William Graff, Farm Service State Executive Director, requesting on behalf of the FHWA, that IDOT's consultant be given access to this information.

Also, access was requested for a large aerial photography showing Conservation Reserve Program acreage, tract numbers and wetland acreage for the study area. The consultant will need to borrow and duplicate the aerial photography and return it the same day.

In the near future Amiee King, from CH2M Hill, will contact your office for an appointment to view this data.

This information will be helpful in describing agricultural operations in the project area and assessing potential impacts resulting from the proposed project.

If you have any concerns regarding this matter, please contact Paula Green of the Illinois Department of Transportation, Peoria District Office at (309) 671-3478.

Thank you for your cooperation in this matter,

Very truly yours,

Joseph E. Crowe, P.E. District Engineer

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cc: Environment (P. Green) CH2M Hill (Attn: Mr. Dan Dupies)

ame Company
son Bureau County Farm Service
Marshall & Putnam County Farm Service
Peoria County Farm Service Address
312 East Backbone Road, Suite A
1511 University Court
Edwards, IL 61528



From

Michael L. Hine

Subject

PESA Review

Date

August 26, 2004

Michael L. Hine

Refer to

IL 29 (FAP 318) Job No. P-94-009-01

New Alignments at Cedar Hills Dr. near CAT Complex in Chillicothe Peorla County

ISGS # 1331B

Sequence # 9816C

Attached is a copy of the Preliminary Environmental Site Assessment conducted by the Illinois State Geological Survey (ISGS) for the subject project as described in your Special Waste Survey Request,

Volatile organic testing was done for this project and the attached (ISGS) report indicates no detection of contamination at the sites tested. The report has assessed a moderate risk for this project. This is the lowest possible rating if anticipated construction intersects an underground storage tank (UST).

The following two archived CERCLIS sites are located adjacent to the project area: Caterpillar Mossville Engine Center (Site 1331B-A [1331A-D]) and Caterpillar Technical Center (Site 1331B-1 [1331A-34]).

It is the opinion of this office, in consultation with the Chief Counsel's Office, that if right-ofway acquisition includes a parcel with an underground storage tank(s) and Land Acquisition Procedures are followed and if construction excavation and utility relocation do not exceed the maximum testing depth at each site, then no additional preliminary testing for the project is necessary.

If these stipulations can be met, then the project will be in compliance with Departmental Hazardous Waste Policy LEN-13. If the stipulations cannot be met, then the statewide consultant should be requested to perform additional investigations. Please notify this office of any actions you may decide to take concerning these sites (i.e., avoidance, further investigation, etc.). The PESA Response form can be found on PMA.

Other findings and recommendations of the report should be carefully considered. If you have any questions regarding this report or the tasking of the statewide consultant, please contact Debbra Mehra at 217/785-6068 or Steven Gobelman at 217/785-4246.

#### Attachment

Office of Chief Counsel - Rm. 311 District Bureau of Land Acquisition

Scott Stitt

Central Bureau of Land Acquisition District Utility Coordinator Todd Hummert

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MEETING SUMMARY

# Floodplain Impacts and Compensation Workshop Illinois Route 29 Phase I Engineering Services Job No. P-94-009-01, P-94-019-02 (PTB 118/56)

#### ATTENDEES:

Maureen Addis/IDOT-D4 John Anderson/IDOT-D4

Ron Davis/IEMA

Mike Diedrickson/IDNR-OWR

Dan Dupies/CH2M HILL

Paula Green/IDOT-D4

Steve Hamer/IDNR Alan Justice/IEMA

Kim Kolody/CH2M HILL

Greg Larson/IDOT-D4

Tom Lerczak/INPC

Mike Lewis/IDOT-D4

Fred Lin/Lin Engineering Charles Perino/IDOT-BDE

Barbara Stevens/IDOT-BDE

J.D. Stevens/FHWA

Cheng Soong/CH2M HILL

Eric Therkildsen/IDOT-D4 Barb Traeger/IDOT-BDE

FROM:

CH2M HILL

DATE:

October 4, 2004

The meeting was convened at 10:00 a.m. on Tuesday, September 14, 2004 in the 6th Floor conference room of the IDOT District 4 headquarters. The overall purpose of the meeting was to discuss the process and procedures for determining floodplain impacts and compensation along the IL 29 corridor. Alternatives for dealing with the floodplain buyout properties in Sparland were also discussed.

Kim Kolody began the meeting by reiterating the meeting objective and reviewing the meeting agenda. Project background and status was also provided, including examples of work that has been completed to minimize impacts to the floodplain, evaluate the impact and compensate for them. Cheng Soong followed with more detail on the procedure and solicited feedback and input from agencies.

#### Concept of Floodplain Encroachment and Compensation

#### Principles and Discussion of Floodplain Encroachment

Area versus Volume: The EIS reports floodplain encroachment as an area and volume measurement. Volume is a more accurate assessment and will be used to determine actual impacts, as the design is more complete.

Hydraulic analysis: Hardcopy FEMA Flood Insurance Rate Maps provide 100-year high water elvation data for the Illinois River and Thenius Creek along the corridor. The insurance rate maps did not have data for other creeks and rivers in the corridor, including

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Senachwine Creek South, Crow Creek, and Senachwine Creek North. For these locations a hydraulic analysis under normal conditions was developed to obtain the necessary information. Mike Diedricksen confirmed that the natural (unobstructed) 100-year flood should be used as the basis for the calculation.

<u>Electronic FEMA Flood Insurance Rate Maps</u> cannot be used to determine 100-year water elevations. It cannot be used to supplement data because it is not accurate enough for detailed project purposes.

Longitudinal versus Transverse Impact: As defined by an adjoining state department of transportation, transverse and longitudinal encroachments are defined as:

Longitudinal encroachment - 30 degree or less crossing of floodplain by the proposed highway. Example: lengths of roadway running along or beside streams, rivers, lakes, etc. This may apply to areas of Senachwine Creek South, the Illinois River, and areas of Crow Creek.

Transverse encroachment - 30 to 90 degree crossing of floodplain by the proposed highway. Example: perpendicular bridge crossing of river or stream. This may apply to areas of Senachwine Creek South crossing at Benedict Road, Senachwine Creek South Crossing at existing IL 29, and Senachwine Creek North.

Mike Diedricksen outlined the acceptable increase in 100-year water levels:

Longitudinal encroachment (urban) = 0.1 feet Longitudinal encroachment (rural) = 0.5 feet Transverse encroachment (urban) = 0.5 feet Transverse encroachment (rural) = 1.0 feet

Modifying the proposed structure design allows the designer to minimize changes in 100-year water levels within the limits shown above. A hydraulic analysis of each proposed bridge structure will be completed as part of the Phase I services. IDNR Water Resources is not concerned with the impacts of transverse "floodway crossings". They are concerned about longitudinal impacts to the "floodway".

Floodway versus Floodplain Encroachment: IDNR Water Resources is interested in the hydraulics and impact to the "floodway", while IDOT and FHWA focus on the significance of the impact to the floodplain and the effect on the value of the resources i.e. wetlands, cultural resources, historical sites, vegetation.

On September 22, 2004, subsequent to the floodplain meeting, Mike Diedrichsen forwarded a document which provided instruction for determining the floodway limits. Fred Lin has tested two cross-sections in Senachwine Creek South, which will be verified by IDNR. If the location of proposed IL 29 is in the floodway, mitigating measures such as will be investigated. Procedures will be assessed with input from IDNR.

A subsequent meeting will be set up with FEMA to solicit their input on the hydraulic analysis process, the longitudinal and transverse impacts and the floodway versus floodplain concerns.

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Significant versus Insignificant Encroachment: As defined by an adjoining state department of transportation, a significant encroachment is any encroachment into the floodplain, which results in:

- (1) a significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route:
- (2) a significant risk, or;
- (3) a significant adverse impact on natural and beneficial flood-plain values.

FEMA may be able to provide processes for determining which encroachments are significant and should be compensated. This information will be provided by FEMA at a subsequent meeting. On inspection of the corridor, impacts to the Illinois River may be insignificant since there is a relatively small encroachment, which would have very little effect on the entire Illinois River.

#### Principles and Discussion of Floodplain Compensation

Cheng Soong described the process that wasused on the IL 29 project for calculating preliminary compensation volumes (1:1 basis) and procedures used to identify compensation sites. Proposed roadway cross-sections need to be evaluated to determine the encroachment volume that is below the 100-year high water elevation (under natural conditions). Floodplain compensation areas were then identified and compensation volumes are calculated; the low elevation of each compensation site needs to be above the flow line of the receiving stream. In some locations, ditches can be widened to create greater capacity to provide floodplain compensation. The ditches need to be above the receiving waters normal flow elevation. Wetlands and low areas were not suitable for compensation sites. The compensation site needs to be located based on its ability to provide the needed volume and that the low point of the compensation site will be above the receiving stream normal flow elevation (for drainage of the site after flood waters recede).

Landlocked properties may be suitable sites for compensation. Floodplain compensation sites may have a secondary value such as providing areas for wetland mitigation and to act as borrow site locations. A complete hydraulic analysis is required to determine the exact encroachment and compensation volumes.

#### Project Floodplain Locations

Approximate encroachment and compensation volumes were determined for various locations along the IL 29 corridor. Tentative compensation locations were provided for discussion purposes. The need to pursue compensation for these or other locations will be determined after coordinating with FEMA. Only longitudinal crossings by IL 29 will require floodway analysis. The following highlights the discussion at each review floodplain location.

Senachwine Creek South: FEMA design year high water elevations are not available for the Senachwine Creek South area. Lin Engineering calculated the 100-year natural high water elevation for study purposes. Areas of Senachwine Creek South may have longitudinal impacts to the floodway and the floodplain. The crossing at Benedict Road and existing IL 29 are transverse crossings and do not need to be compensated for floodway impacts.

However, according to IDNR, an analysis will need to be completed by Lin Engineering to determine if there are longitudinal impacts to the floodway and if mitigation is needed or if proposed IL 29 needs to be relocated out of the floodway.

The proposed improvements will only effect the Senachwine Creek South floodway, not the Illinois River floodway.

Crow Creek: At Crow Creek, FEMA design year high water elevations were not available Lin Engineering calculated the 100-year natural high water elevation for study purposes. The main crossing of Crow Creek would be a transverse crossing and will therefore not require compensation according to IDNR.

There is a longitudinal encroachment to the Crow Creek floodplain north of the main crossing. Limits of the floodway will need to be computed by Lin Engineering to determine if there is a longitudinal encroachment to the floodway.

Senachwine Creek North: Lin Engineering determined the 100-year high water elevation at Senachwine Creek North because FEMA design year high data was not available. This is a transverse crossing, which will not require compensation of the floodway.

Illinois River Floodplain at Miller-Anderson Woods: FEMA design year data was available for the Illinois River and were used for the analysis. This is a longitudinal encroachment of the Illinois floodplain, but may not encroach the floodway. The impact to the floodplain may also have an insignificant effect on the Illinois River floodplain and the floodway limits will need to be determined by Lin Engineering.

Illinois River/Gimlet Creek/Thenius Creek at Sparland: FEMA design year data was available for the Illinois River and were used for the analysis. This is a longitudinal encroachment to the Illinois River floodplain that does not have a significant impact to the river floodplain. Research is being conducted by Lin Engineering to determine the floodway limits of the Illinois River.

#### Floodplain and Floodway Action Items

Floodway limits will be determined at Senachwine Creek South, the Illinois River, and Crow Creek. If there is impact to the floodway, CH2M HILL will assess design options to reduce the encroachment.

A meeting will be scheduled with FEMA and IEMA to evaluate the above-described processes for assessing and addressing longitudinal encroachments to the floodplains in the project corridor. The meeting objective will also be to reach concensus on the floodplain encroachment and compensation methods proposed for IL 29 and to determine the reporting methods for the EIS.

#### Sparland Floodplain Buyout Properties and Alternate 3/3A

There are 17 properties within the Sparland corporate limits that were purchased as floodplain buyouts, 12 are currently owned by IEMA and 5 are currently owned by INDR. Some of the floodplain buyouts are affected by the split diamond interchange, which may be carried forward in the design process. However, due to deed restrictions on the floodplain buyout properties the interchange was modified to avoid them. The modifided interchange has greater impacts to environmental resources and has a higher cost, FEMA will provide feedback to determine which alternative will be carried forward in the study. This

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information and selection of an interchange at Sparland is needed before proceeding with the 90% Central Section plans.

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#### ATTENDANCE ROSTER

SUBJECT

FLOODPLANS MITS

MEETING DATE

SEPTEMBER 14 2004

# CH2MHILL

NAME	REPRESENTING	ADDRESS, PHONE & E-MAIL
Steve HAMER	IDMA	Shomer (Donnai) & State, 1645
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ALAN THETICE	IDNR	217-782-2457 afractive and me
Ron Davis	IEMA	1035 outo Park Springfield 62704 217-524-1003
John Anderson	IDOT-DISTA	, ,
MIKE DIRDREUSEN	IDNR-OWTE	217-782-4426 ONZNATURAL BESONECES DR, STELD
Fred Lin	LIN' BLIGHNE CHINE	2 630.323.5168; findlinengeon
Barl- Tranger	BDE	217/785-0202
Barbara Janon	5 BDE	217 785 4245
J.D. STEYENSON	FHWA	217-492-4638
Charles Perino	IDOT-BDE	217~785-2130
Maurem Addes	JDOT/D4	309 671 3454
Paulo Green	JD07-D4	309 671 3478
Greg Lancon	IO=7-04	309 671 3479
ERIC THERKINSEN	IDOT - DY	309-671-3491
DAN Dupies	CHam	414-272-2426
TOM LERUZAK	INPC	J09-540-2744 + Herczak @dnsmuil. State.il.
CHENG SOUNG	CHIZM	773-693-3800×226
Kim Kolody	CHZM	773-693-3800 x 245
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MEETING SUMMARY

CH2MHILL

IDNR Meeting to Discuss Impacts/Mitigation of IDNR Property and Natural Areas & Miscellaneous IL 29 Items

Illinois Route 29 Phase I Engineering Services Job No. P-94-009-01, P-94-019-02 (PTB 118/56)

#### ATTENDEES:

IDOT **IDNR** Maureen Addis Todd Bitner John Anderson Steve Hamer Paula Green Michelle Simone Greg Larson Michael Weber Mike Lewis INPC Charles Perino Tom Lereczak Barbara Stevens CH2M HILL Barb Traeger Dan Dupies

Jim Jodie Kim Kolody Dan Nowak

FROM:

CH2M HILL

DATE:

October 12, 2004

A meeting was held on Monday, October 4, 2004 at District 4 to:

- To provide an update of IL 29 project progress to IDNR and INPC.
- To describe geometric design modifications that had been evaluated to minimize impacts to IDNR property and natural areas along the project corridor.
- ◆ To obtain feedback from IDNR and INPC on the revised designs.
- ♦ To discuss miscellaneous IL 29 items.

In June 2004, a meeting was held with IDNR to present the IL 29 design, to discuss impacts to IDNR land and to receive feedback on potential mitigation. At that time, IDNR requested that additional designs be studied to further minimize impacts to IDNR and natural areas. Particular attention and design emphasis was placed on the Land and Water Reserve because of the high protection guidelines for this property.

Subsequent to the June meeting, CH2M HILL refined the design at each IDNR property and natural area and developed a comparison table to review with IDNR. In the table, the previous design is referred to as the "Original Design"; the revised design is referred to as the "Current Design".

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Kim Kolody provided an overview of the design approach to minimize impacts. Dan Nowak provided more detailed design and impact information at each environmentally sensitive location.

#### **Design Approach to Minimize Impacts**

Two methods were used on IL 29 to minimize impacts to IDNR land and to natural areas, guardrail and a split profile,

#### Guardrail

At some locations, impacts could be minimized by modifying the standard 6:1/4:1 foreslope to a 2:1 foreslope and adding guardrail.

#### Same Profile versus Split Profile

Same Profile - The original design assumed the same profile for northbound and southbound lanes. The northbound lanes would be built on the existing lanes and the southbound lanes would widen to the west into the bluff. In bluff areas, this results in high retaining walls cut into the bluff. The walls may require tiebacks because of slope instability. IDOT would require permanent easements behind the wall to maintain the tied-back. In some locations, the tie back easements could be 50 to 75 feet into the bluff, an impact IDNR would like to avoid.

<u>Split Profile</u> - A split profile design (with northbound lanes placed at the existing IL 29 location and elevation and southbound lanes raised to the bluff elevation on the west side) was developed at critical locations to minimize cuts into the bluff and to also reduce impacts.

In summary, the split profile design, or the Current Design, results in reduced effects to IDNR and Natural Areas. This Design was recommended for each IDNR property and natural area. Steve Hamer will send a letter to IDOT indicating their comments for each design.

Details presented and discussed at each IDNR and natural area are shown below. Exhibits were provided for each site, including an impact table. In the table, the typical section with the same profile for northbound and southbound is labeled "Original Design". The split profile and the 2:1 foreslope design is labeled "Current Design".

#### Design at Specific IDNR and Natural Area Locations

#### Marshall State Fish & Wildlife Area Spring Branch Unit

The Original Design required right-of-way from the Spring Branch Unit to accommodate full slopes and ditches. It also required a temporary easement to construct their driveway to the IDOT rest area.

For the Current Design at Spring Branch, the proposed IL 29 east foreslope will be steepened to 2:1 and a guardrail installed at this location. The existing east ditch will remain as-is; this does not create any impacts to the IDNR property. The existing driveway from IL 29 will be relocated to the existing rest area. Access to the IDNR property from the rest area will require right of way acquisition from the Lee & Wilda Miller property. Construction of the driveway from the rest area into IDNR land will require some tree removal. A full intersection is proposed on IL 29 at the north entrance to the rest area, allowing for U-turns. The Current Design was recommended.

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The Current Design reduces the cut into the bluff (split profile) compared to the Original Design. It requires the same amount of right-of-way as the Original Design; the cost is slightly higher due to the retaining wall for the split profile. The Current Design was recommended.

#### Hopewell Hill Prairie Natural Area

County Line Hill Natural Area

The Current Design does not require any permanent easements to build the tiebacks for the retaining wall as required with the Original Design. A temporary easement is needed to reconstruct an existing driveway (into the bluff). To reestablish the driveway, trees may be removed. The Current Design was recommended.

#### Marshall County Hill Prairie Natural Area

The Original Design required tiebacks into the bluff.

The Current Design does not require any permanent easements and there is less permanent impact within the existing right-of-way to build and maintain the tiebacks for the retaining wall. However there is more temporary impact within the existing right-of-way due to grading.

The cost is less than the Original design because the retaining walls are shorter in cut sections so that a cantilever wall can be used. At some locations, an MSE wall on fill is being considered. This reduces the cut into the existing bluff and the right-of-way impact. The Current Design was recommended.

#### Marshall County Hill Prairie Land & Water Reserve

As with the Marshall County Hill Prairie Natural Area, the Current Design at the Land & Water Reserve eliminates the permanent easement by eliminating the tie-backs and reduces the temporary easement for reconstruction of the driveway located at Station 3544+60. Construction of the driveway will require a temporary easement on Land & Water Reserve property. The left and right fill slopes on the driveway will take some additional land and possibly remove some of the trees that have grown onto the driveway. Per IDNR, the Nature Preserve Commission will support the "driveway/parking lot" to remain the same size as existing, although the use of this driveway is limited because of the bluff on the west side. The "pad" for the driveway will be a little smaller than existing because the split profile places the roadway in fill and the driveway in fill. The surface should not be paved. INPC noted that Nature Preserve Commission should have well defined physical limits for the existing driveway. IDNR will evaluate the need to replace this driveway since the existing driveway to the south will remain and be improved. They will contact IDOT with the decision.

A retaining wall is proposed on the west side of IL 29. A gutter is proposed on the uphill side of the wall to collect and convey stormwater to drop inlets. Maintenance of the wall and gutter will take place within the existing right-of-way. If a greater width is needed for maintenance in the future, each occurrence will need Nature Preserve Commission

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approval. IDNR requested that the construction limits needed by the contractor be "taped" in the field for easy identification so that it will not to be disturbed. A specification currently exists (or can be developed) to "armor" trees at risk to minimize tree kills.

The Current Design was recommended.

#### Marshall State Fish & Wildlife Area, Sparland Unit, Alternate 3 and 3A

Alternate 3 and 3A were described; these are the final alternates being considered for Sparland. Alternative 3 is similar to the original spilt diamond interchange design but with more detailed improvements along existing IL 29 and IL 17. Alternative 3A is also a split diamond interchange, but it is shifted further to the east to avoid the floodplain buyout properties. Alternative 3A has greater impacts to IDNR property, but it may be necessary if FEMA deed restrictions determine that the floodplain buyout properties cannot be impacted. A meeting is planned for mid-November to discuss the interchanges with FEMA and reach consensus regarding the recommended alternate.

The right-of-way shown for Alternate 3 and 3A indicates the land that is needed for roadway improvements. As more detailed design takes place during Phase II the IDNR right-or-way required may change slightly.

A handout was provided showing the landlocked properties for both alternates. Paula noted that the last 2 landlocked properties in the handout may actually have an access that would remove them from the list (Charles Fosbender Estate and Antonio Turk), but the landowners need to be contacted to verify access.

CILCO property is landlocked and no future utilities are planned, IDNR indicated that Ducks Unlimited is considering purchasing the Bunge Corporation property.

IDNR (Steve Hamer) and Marshall State Fish & Wildlife (Larry Rice) will be sent the exhibits and tables showing landlocked properties at Sparland and at Senachwine Creek south.

#### Miller Anderson Woods

The proposed typical section is a 22' median with guardrail on the west side. The highway foreslope adjacent to MAW will not be disturbed. The only west side disturbed areas is for installation of culverts; erosion control measures will be part of the construction contract. The proposed profile of IL 29 is the same as existing; it is not necessary to reconstruct this driveway. The temporary easement shown on the plans for this driveway is not needed. The beavers have moved from this area and the pond is shrinking as a result. The dam continues to hold water without the beaver's maintenance, but the water level has dropped partially because of dry years.

ISGS groundwater monitoring well installation was delayed because of eagle nesting. Five wells were installed in late July and ISGS is still doing the three-month monitoring. Results will be provided when information is available.

IDNR previously requested that IDOT look at a closed drainage system to collect surface water and prevent it from entering the MAW (from the southbound lanes and median).

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This will require disturbing the foreslope. IDNR does not want any unneeded disturbance to this area. A closed system concentrates the pollution and pushes it further downstream.

The IDNR noted that there is a concrete paved ditch on the west side of IL 29, south of MAW. The concrete has blocked springs in the cut slope resulting in the creation of a wetland. This ditch is proposed to be modified during design and the IDOT usually replaces these areas with something that can grow vegetation. This can be coordinated with IDNR during final design.

#### **Meeting Conclusion**

IDNR will provide a letter to IDOT indicating their comments (commitments) to each of the designs for IL 29. IDNR was asked to continue thinking about mitigation issues on their properties.

#### Nature Preserve

Coordination with the Nature Preserve Commission will be as follows:

IDOT will coordinate with Steve Hamer and Steve will talk to the Nature Preserve Committee. Steve will contact IDOT with results.

#### Bio-Surveys

IDOT will provide IDNR an update of the bio surveys.

#### Items to be Provided

Barb Traeger needs purpose and need and project description, location map (3 sheets at 11"x17" of the corridor), indicating the project right-of-way and roadway improvements for the bluff and existing alignments over an aerial background. The environmental resources should not be shown.

#### Miscellaneous Items (Post IDNR Meeting)

Please see the Post Meeting Items Agenda for discussion items.

<u>PIM Comments</u> – for PIM #2 also summarize the comments using the more detailed approach that was used for PIM #1. Show tickmark for each comment made from all the letters

<u>Bike Paths</u> – at the viaduct on the north side of Chillicothe, show bike paths on both sides. Use minimum of 8' clear width on both sides. To accommodate combined use by bikes and pedestrians (going to the Chillicothe Recreation Center), the width may need to be widened. Use of this bike path will probably be two-way. At Sparland, the bike path will be located on the ramps with appropriate signing. In Sparland, provide minimum 5' width for bikes.

Orthophotos - Add to the list provided as follows:

At Kentville Road, include Miller Anderson Woods in a photo looking south,

At Putnam, take a photo looking northeast; make sure to include the relocation of Bradford and the road closures in the City.

Henry Bypass - include a photo looking northeast to the City.

Sparland - take a lot of photos to decide which one to use,

Illinois River narrows near Land and Water Reserve – take a couple of photos; one should be looking southwest and another looking northwest.

North side of Chillicothe – take a photo looking north towards the viaduct and looking west toward trumpet interchange. Take a lot of pictures here.

Rome West Interchange - take some photos looking northeast.

Cedar Hills Interchange – take a photo looking southwest toward interchange, including the Caterpillar plant and the bluff west of the proposed interchange.

IL 6 interchange - no photo's needed here.

BN&SF RR at Truitt/Galena Road Gravel quarry Meeting – over versus under alternate sketches were provided (prepared by Hutchison). For now, assume the IL 29 design is over the BN&SF RR. Corridor protection is important to minimize quarry mining.

<u>IDS Submittal Schedule</u> - CH2M HILL will e-mail the schedule to IDOT, Do not submit IDS's all at once. Review comments will be provided at bi-monthly meetings,

Bluff Memo - IDOT provided comments to the memo that was submitted August 27, 2004.

Include dropped alternates at Sparland. Include the improvements to the east leg of IL 17. If the bluff is dropped, this shows there is localized avoidance on the east leg of IL 17. For the table on Page 4, drop the 1st and 3rd row.

At Whiffle Tree house, provide distance from proposed right of way to the house.

For Barrville avoidance, remove comments about economic issues.

Impact Summary Table – use latest impacts, Cost can be represented as % comparison. Check for accuracy.

For the IDNR and natural lands, include letter from Steve Hamer of IDNR; indicate T & E's are not 4f. <u>Crow Creek Watershed Committee</u> – IDOT will e-mail them to set up a meeting.

<u>Project Meeting</u> – plan for last part of November 2004 to discuss project status, tasks not needed for the project and extra work.

<u>Iowa Interstate RR/Lincoln Southern RR</u> – meeting is scheduled for November 10, 2004. CH2M HILL will provide list of exhibits.

FEMA/FHWA Floodway Meeting - IDOT to schedule this meeting towards the end of October.

Summary of IL 29 Decisions

South Section -

CHI/OCT04 2004 IDNR MEETING MEMO.DOC

Include interchanges at Rome West and McGrath. For Phase I submittal, the proposed right of way needs to be determined. The extent of design for the Rome West and McGrath interchange will be confirmed by IDOT. At this time, the work plans is as follows:

Rome West – extend interchange design west to Krause. Widen Krause/Rome West intersection to provide for turning vehicles. Do not do Rome West design to the east of the interchange, but determine right of way needs for the Knox Street connection to existing IL 29. The DTM coverage from Martinez does not extend to existing IL 29. DTM and topo surveys cost estimates will be provided by CH2M HILL. This is considered extra work.

McGrath - do not do detailed design (no profile is needed) because McGrath is a local road to be designed by others. Indicate this on plans and show as dashed lines. To determine right of way (estimated), use typical section for a local two-lane road with ditches and determine estimated distance to proposed right of way. This is considered extra work.

The meeting adjourned at 4 PM.

ATTENDANCE ROSTER

SUBJECT

MEETING DATE

### Detables 4, 2004

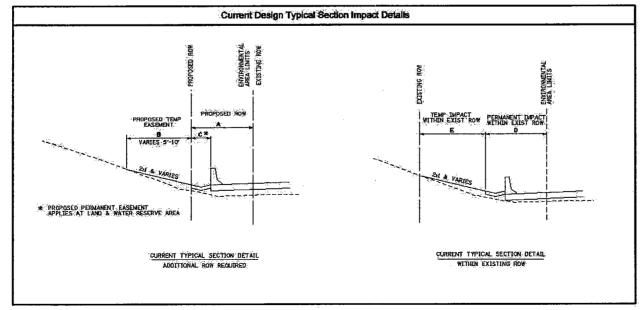
NAME	REPRESENTING	ADDRESS, PHONE & E-MAIL
Paula Green	IDOT DUTY	
TODO BITTHEY	IDNR	
Mike Lewis	1DOT - DISTRICT 4	309-671-3474
John Anderson	IDOT-D4	671-3493
Michae Weber	TONR	
Michelle Simone	IDNR	
Barbaen Stevens	IDOT-BDE	217 7854245
Barb Traeger	IDOT-BDE	217-785-0202
Charles Perino	IDOT-BDE	217-785-2130
Greg Lanson	HO - 700I	809-671-3479
Steve HAMER	IDMR	217-785-4862
VAN Dupies	M	414-272-2426
Mauren Addis	IDOT /04	309 671 -3454
Kim Kolody	CHAM HILL	773 693 3809
Lan Nowak	11	il
Jim Todie		11
TOM LERCIAK	INPC	309-547-2744

#### Illinois Route 29 Phase I Study IL 6 to I-180

# Impact Comparison for Alternative Designs at Natural Areas and IDNR Property Along the Widening IL 29 Alignment

•		IMPACT TYPE (see graphic below)						
AREAS OF IMPACT MINIMIZATION	Design	Proposed New Right- of-Way Acres (SQ FT)	Proposed Temporary Easement Acres (SQ FT)	Proposed Permanent Easement Acres (SQ FT)	Permanent Impact Within Existing ROW Acres (SQ FT)	Temporary Impact Within Existing ROW Acres (SQ FT)	Isolated IDNR Property Acres (SQ FT)	Cost <sup>10</sup>
		Α	В	С	D	E	F	1
Marshall State Fish & Wildlife Area Spring Branch Unit	Original Design <sup>1</sup>	0.29 (12600)	0.20 (8600)					*
	Current Design <sup>2</sup>	0	0.20 (8600)	0	0	0	0	NA
County Line Hill Natural Area (private)	Original Design <sup>1</sup>	0	0.02 (1000)	0	0	0	0	\$3.0 M
	Current Design <sup>3</sup>	0	0.02 (1000)	0	0	0	0	\$3.3 M
Hopewell Hill Prairie Natural Area (private)	Original Design <sup>†</sup>	0.15 (6600)	0.18 (7800)**	0.29 (12700)	0.38 (16400)	0	0	\$5.1 M
	Current Design <sup>4</sup>	0.15 (6600)	0.19 (8400)**	0	0.36 (15800)	0.005 (200)	0	\$5.2 M
Marshall County Hill Prairie Natural Area (private)	Original Design <sup>1</sup>	0	0.17 (7400)	0.69 (30100)	1.35 (58700)	0.05 (2000)	0	\$8.0 M
	Current Design <sup>4</sup>	0	0.02 (700)	0.5	0.73 (31800)	0.19 (8100)	0	\$6.6 M
Marshall County Hill Prairie Land and Water Reserve	Original Design <sup>1</sup>	0	0.24 (10600)	0.44 (19100)	0	0	0 .	\$8.0 M
	Current Design <sup>5</sup>	0	0.09 (4000)	0	0	0	0	\$6.6 M
Miller-Anderson Woods Natural Area <sup>7</sup>	Current Design <sup>6</sup>	0	0.24 (10600)	2.03 (88300)	5.50 (239600)	0	0	NA
ONR Property in Sparland Alternative 3	Current Design <sup>8</sup>	7.25 (315600)	0	. 0	0	0	1.38 (60200)	NA
ONR Property in Sparland Alternative 3A	Current Design <sup>9</sup>	7.83 (341000)	0	0	0	0	4.08 (177800)	NA

- 1. The Original Design was shown in the 50% plan set of April 2004. There was one profile for northbound and southbound IL 29 and standard right-of-way widths.
- 2. The Current Design at the MSFWA Spring Branch Unit eliminates permanent impact to IDNR property. At this location design modification included use of guard rail with a 2:1 foreslope on the east side of the road.
- 3. The Current Design at County Line Hill Natural Area involves splitting the NB and SB profiles, with the NB lanes remaining at the existing grade while the SB lanes are raised to eliminate any cut into the adjacent bluff. This will minimize slope instability from the bluff.
- 4. The Current Design at Hopewell Hill Prairie and Marshall County Hill Prairie Natural Areas have been modified to reduce impact using a different approach than at the Spring Branch Unit. At these the locations, the NB lanes remain at the existing grade while the SB lanes are raised to eliminate the tied-back retaining wall on the west side. At most locations a barrier is used on the west side to reduce impact. At some locations an MSE wall on fill is necessary. This reduces both the cut into existing ground and right-of-way impact.
- 5. The Current Design at the MSFWA Land and Water Reserve includes the NB lanes at the existing grade and the SB lanes raised to eliminate the tied-back retaining wall on the west side. At most locations a barrier is used on the west side to reduce impact. At some locations an MSE wall on fill is necessary. This reduces both the cut into existing ground and right-of-way impact.
- 6. The Current Design was shown in the 90% plan set of April 2004. At this location the typical section includes use of guard rail with a 2:1 foreslope on the west side, 22-foot median and retaining wall on the east side of the road.
- 7. The Nature Preserve in Miller-Anderson Woods is not impacted by the project.
- 8. The Current Design is a split diamond interchange, located east of the Railroad tracks and impacts the floodplain buyout properties in Sparland.
- 9. The Current Design is a split diamond interchange, located east of the Railroad tracks. It avoids impact to the floodplain buyout properties by shifting to the east.
- 10. Cost is estimated in 2004 dollars
- \*\* Includes Hopewell Driveway Temporary Easement



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